The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An electrolyte in an electrochemical cell comprising a lithium complex salt of formula

Li
$$\begin{bmatrix} R^{5} & O \\ O \\ R^{4} & O \end{bmatrix} = \begin{bmatrix} O \\ O \\ O \\ O \\ R^{3} \end{bmatrix}$$
 (I)

where

 1 and 2 are optionally directly linked to one another via a single or double bond, and each, independently is phenyl, naphthyl, anthracenyl or phenanthrenyl, optionally monoto hexasubstituted by C_{1} . C_{6} alkyl, C_{1} . C_{6} -alkoxy or halogen; or

each independently is pyridyl, pyrazyl or pyrimidyl, each optionally monoto tetrasubstituted by $C_1.C_6$ -alkyl, $C_1.C_6$ -alkoxy or halogen; or

each independently is hydroxybenzenecarboxyl, hydroxynaphthalenecarboxyl, hydroxybenzenesulfonyl or hydroxynaphthalenesulfonyl, each optionally monot tetrasubstituted by C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy groups or halogen;

ring substituents R^3 - R^6 are optionally directly linked to an adjacent ring substituent via a single or double bond and are:

 C_1 . C_6 -alkyl, C_1 . C_6 -alkoxy or halogen[[,]];

phenyl, naphthyl, anthracenyl or phenanthrenyl, each optionally monot be hexasubstituted by C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy or halogen; or

pyridyl, pyrazyl or pyrimidyl, each optionally mono- to tetrasubstituted by C₁.C₆-alkyl, C₁.C₆-alkoxy or halogen.

2. (Currently Amended) An electrolyte for a secondary lithium battery comprising a lithium complex salt of formula

Li
$$\begin{bmatrix} R^5 & 0 & 0 & 0 \\ R^5 & 0 & 0 & 0 \\ R^7 & 0 & 0 & 0 \end{bmatrix}$$
 (I)

where

 R^1 and R^2 are optionally directly linked to one another via a single or double bond, and each, independently is phenyl, naphthyl, anthracenyl or phenanthrenyl, optionally monoto hexasubstituted by C_1 - C_6 alkyl, C_1 - C_6 -alkoxy or halogen; or

each independently is pyridyl, pyrazyl or pyrimidyl, each optionally monot tetrasubstituted by $C_1.C_6$ -alkyl, $C_1.C_6$ -alkoxy or halogen; or

each independently is hydroxybenzenecarboxyl, hydroxynaphthalenecarboxyl, hydroxybenzenesulfonyl or hydroxynaphthalenesulfonyl, each optionally monot to tetrasubstituted by C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy, groups or halogen;

ring substituents R^3 - R^6 are optionally directly linked to an adjacent ring substituent via a single or double bond and are C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy or halogen[[,]];

phenyl, naphthyl, anthracenyl or phenanthrenyl, each optionally monot be hexasubstituted by C₁₋C₆-alkyl, C₁₋C₆-alkoxy or halogen; or

pyridyl, pyrazyl or pyrimidyl, each optionally mono- to tetrasubstituted by $C_1.C_6$ -alkyl, $C_1.C_6$ -alkoxy or halogen;

and at least one additional lithium salt and/or borate complex.

- 3. (Currently Amended) The electrolyte of claim 2, wherein the additional lithium salt is LiPF6, LiBF4, LiClO4, LiA5F6, LiCF3SO3, LiN(CF3SO2)2, or LiC(CF3SO2)3

 Li⁺[PF₆], Li⁺ [BF₄], Li⁺ [ClO₄], Li⁺ [AsF₆], Li⁺ [SO₃CF₃], Li⁺ [N(SO₂CF₃)₂],

 Li⁺[C(SO₂CF₃)₃] or a mixture thereof.
- 4. (Currently Amended) The electrolyte of claim 2, wherein the borate complex is of the formula

$$\text{Li}^{+}\text{B}^{-}(\text{OR}^{1})_{\text{m}}(\text{OR}^{2})_{\text{p}}$$

$$\text{Li}^{+}\text{B}^{-}(\text{OR}^{1})_{\text{m}}(\text{OR}^{2})_{\text{p}}$$

where

where

m and p are 0, 1, 2, 3 or 4, with m+p=4, and

 $\mathbf{R}^{\frac{1}{2}} \underline{\mathbf{R}^{1'}}$ and $\mathbf{R}^{\frac{2}{2}} \underline{\mathbf{R}^{2'}}$ are optionally directly linked to one another via a single or double bond,

each, independently is an aromatic or aliphatic carboxylic, dicarboxylic or sulfonic acid radical, or

each, independently is an aromatic ring from the group phenyl, naphthyl, anthracenyl or phenanthrenyl, each optionally mono- to tetrasubstituted by A or Hal, or

each, independently is heterocyclic aromatic ring from the group pyridyl, pyrazyl or bipyridyl, each optionally mono- to trisubstituted by A or Hal, or

each, independently is an aromatic hydroxy acid from the group aromatic hydroxy carboxylic acids or aromatic hydroxy sulfonic acids, each optionally mono- to tetrasubstituted by A or Hal,

and

Hal is F, Cl or Br

and

A is an alkyl having from 1 to 6 C atoms, and optionally, mono- to trihalogenated.

5. (Currently Amended) The electrolyte of claim 2, wherein the lithium salt is of the formula:

Li[†]OR′

where R'

is an aromatic or aliphatic carboxylic, dicarboxylic or sulfonic acid radical, or

is an aromatic ring from the group phenyl, naphthyl, anthracenyl or phenanthrenyl which can be unsubstituted or mono- to tetrasubstituted by A or Hal, or

is a heterocyclic aromatic ring from the group pyridyl, pyrazyl or bipyridyl, optionally mono- to trisubstituted by A or Hal, or

is an aromatic hydroxy acid from the group of aromatic hydroxy carboxylic acids and or aromatic hydroxy sulfonic acids, optionally mono- to tetrasubstituted by A or Hal,

and

Hal is F, Cl or Br

and

A is <u>an</u> alkyl having from 1 to 6 C atoms, and optionally, monot trihalogenated.

6. (Currently Amended) The electrolyte of claim 2, further comprising compounds of formula:

$$[([R^{1}"(CR^{2}"R^{3}")_{k}]_{1}A_{x})_{y}Kt]^{+} - N(CF_{3})_{2}$$

$$[([R^{1}"(CR^{2}"R^{3}")_{k})_{y}]Kt]^{+} - [N(CF_{3})_{2}]^{-}$$

where

$$Kt = N, P, As, Sb, S, or Se$$

$$A = N, P, P(O), O, S, S(O), SO2, As, As(O), Sb, Sb(O)$$

$$R^{4}{}^{\prime\prime},\,R^{2}{}^{\prime\prime}$$
 and $R^{3}{}^{\prime\prime}\,\,\underline{R^{1}}^{\!\!"},\,R^{2}{}^{\!\!"}$ and $R^{3}{}^{\!\!"}$, independently are

 H_7 , halogen, alkyl C_nH_{2n+1} , optionally substituted; alkenyl having 1-18 carbon atoms and one or more double bonds, optionally substituted; and alkynyl having 1-18 carbon atoms and one or more triple bonds, optionally substituted; cycloalkyl C_mH_{2m-1} , optionally substituted; heteroaryl, optionally mono-or poly-substituted; and phenyl, optionally mono- or polysubstituted,

A optionally at various positions in R¹", R²" and/or R³",

Kt optionally at cyclic or heterocyclic rings,

the groups bound to Kt are independent,

where

$$n = 1-18$$

$$m = 3-7$$

$$k = 0$$
, or $1-6$ and

1 = 1 or 2 in the case of x=1 and 1 in the case x=0

$$x = -0,1$$

$$y = 1-4$$
.

- 7. (Canceled)
- 8. (Currently Amended) The electrolyte of claim 2, wherein the borate complex is a salt of formula:

where

M is a metal ion or tetraalkylammonium ion,

$$x, y = are is 1, 2, 3, 4, 5 or 6, and y is 1;$$

 R^{4} to R^{4} N^{4} are independently C_1 - C_8 -alkoxy or carboxy radicals which are optionally directly linked to an adjacent ring substituent via a single bond or double bond.

9. (Canceled)

10. (Currently Amended) An electrochemical cell or a battery comprising an electrolyte comprising a lithium complex salt

Li
$$\begin{bmatrix} R^5 & 0 & 0 \\ R^5 & 0 & 0 \\ 0 & 0 & 1 \\ R^4 & 0 & 0 & 1 \end{bmatrix}$$
 (I)

where

 R^1 and R^2 are optionally directly linked to one another via a single or double bond, and each, independently is phenyl, naphthyl, anthracenyl or phenanthrenyl, optionally monoto hexasubstituted by C_1 - C_6 alkyl, C_1 - C_6 -alkoxy or halogen; or

each independently is pyridyl, pyrazyl or pyrimidyl, each optionally monot to tetrasubstituted by C₁.C₆-alkyl, C₁.C₆-alkoxy or halogen; or

each independently is hydroxybenzenecarboxyl, hydroxynaphthalenecarboxyl, hydroxybenzenesulfonyl or hydroxynaphthalenesulfonyl, each optionally monot to tetrasubstituted by C_1 - C_6 alkyl, C_1 - C_6 -alkoxy groups or halogen;

ring substituents R^3 - R^6 are optionally directly linked to an adjacent ring substituent via a single or double bond and are C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy or halogen[[,]];

phenyl, naphthyl, anthracenyl or phenanthrenyl, each optionally monot be hexasubstituted by $C_1.C_6$ -alkyl, $C_1.C_6$ -alkoxy or halogen; or

pyridyl, pyrazyl or pyrimidyl, each optionally mono- to tetrasubstituted by $C_1.C_6$ -alkyl, $C_1.C_6$ -alkoxy or halogen.